Chapter 4
Your First Database Client

During first steps I did focus on Server Application, and now is time to understand how RESTDataWare works at Client Side. But first let's prepare our server to send a database for our client.

Implementing restaurant API

Last chapter I introduce to you the aim of app "Restaurant API". To implement it, remember both approaches I've introduced in first chapter: 1. DwPoolerDb; 2. DwServerEvents. Can you understand the main difference between them?

Goals

1. Implement a RAD Client which connects at Database direct in our Server.

2. Implement an API that exposes the behavior of Restaurant for any language.

I hope you had already implemented the structure presented at Image 8. The architecture of RestDWPooler. This diagram show how to configure a full functional database on server, that is just enough available to consume in another Client Application. Don't worry if you didn't understand yet. I will implement that structure again step by step.

A RAD Server using RDWPoolerDB

The easiest way to create a CRUD that consumes RDW server is to connect RDWPoolerDb. In your Server DataModule, let configure a RDWPoolerDb. As you put this component in a Datamodule that's inherited from TServerMethodDataModule, it is already available to consume in Client. The only property you need to setup on a RDWPollerDb is the Driver of Connection you are using.

 In this example I'm using the Firedac Connection, because this I've putted the component TRestDWDriverFD. Look at your "RestDataware Core Drivers" palete if you have already installed the driver you want. Other drivers are available to install at RDW Folder, for example Unidac, Zeos, etc. In component Driver has a property to setup your connection. And it is all! That is the secret to keep simple to configure and to flexible scale your application in the future. You can easily change to another database or aggregate another connection for different purposes.

`Each Connection you want to configure you need to put another RDWPoolerDb and another Driver.`

We create our Server that has RDWPoolerDb, which provides full access to our Database. I don't know which database you are using, to prove you the database layer doesn't mind. I mean the database looks like a classical Delphi Client-Server application. The RestDataware will create ever mechanics you need to access this database remotely.

If you did not configure your database connection correctly the connection error will appear on your client.

Save your server application, and then compile it. I recommend you open another Delphi to create the client. You can also add a new application for current project group. Save as Client.DPR

A RAD Crud using RestDWClientSQL

To create the Client run the server in background and open the new project called Client.DPR. Put a component RestDwDatabase which provides an Image of your RDWPoolerDb(Server) .

Server RDWPoolerDb ← RestDwDatabase **Client**

To Configure RestDwDatabase you need to fill the properties

PoolerPort	The same port you server is running	Example: 8082
PoolerService	The IP your server is published	127.0.0.1
Password	The authentication you put on server	Testserver
Login	The authentication you put on server	Testserver
Encoding	The encoding of Server	esUTF8
PoolerName	The connection you want	ConRestaurant

You can test if your server is running correctly in design time. Choose the property "PoolerName" and click the pooler name you configure on server.

Now you are ready to implement your SQL on Client Side.

Add a component of pallete RestDataware Core DB, the component
RestDwClientSQL

Connect RestDwClientSQL to RestDwDatabase. Fill the SQL text. You can use the RestDwClientSQLEditor to perform the SQL you want. As you can see the tables of connection appear on left side, also the fields of selected table. Everithing is very familiar if you have used Delphi already. Add a grid and connect to see the magic have done.
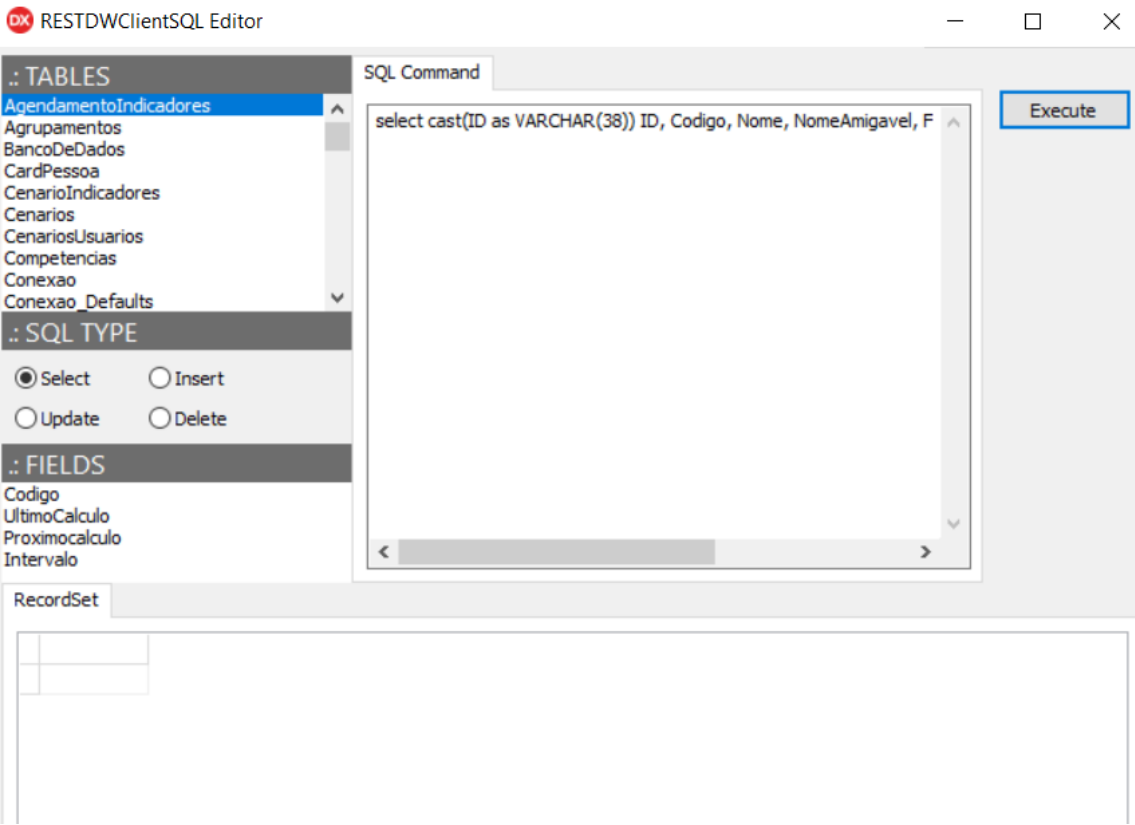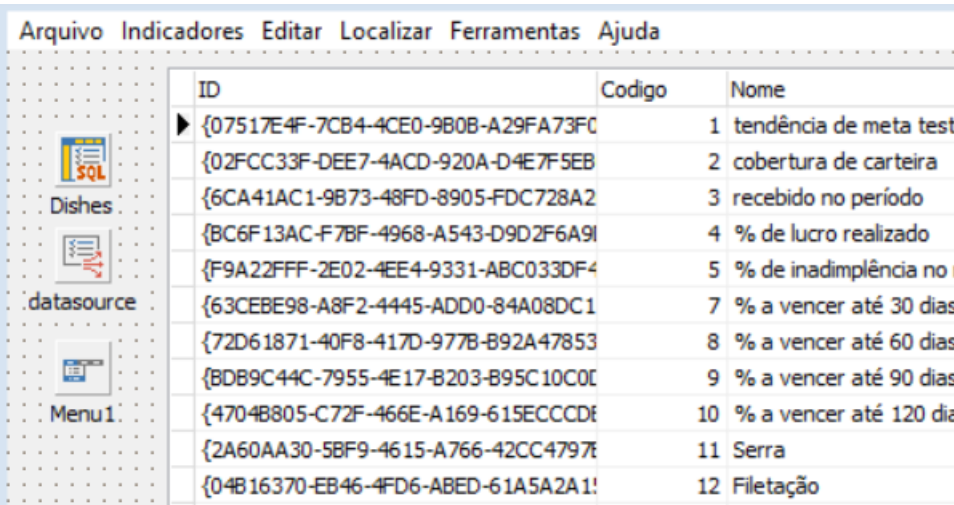

Image 10. RestDwClientSQL Editor

Image 11. A delphi form consuming RestDw in Design Time

Contact

If you have some question about RestDW have a look at installation guide, otherwise you can send to me an e-mail at ricardodarocha@outlook.com.

Visit official web-site https://www.restdw.com.br/

Join our community using Telegran, Skype or Facebook.

You will find me at RestDW Skype Group 1

You can read my profile in Linked'in

Visit my github to get some Delphi example. I will publish exclusive contents about RestDw library.